

Notice of Allowability

Application No.

10/780,404

Examiner

Cheryl Lewis

Applicant(s)

MATSUDA, TOMOTAKA

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the applicant's communication received on November 30, 2006.
2. ☒ The allowed claim(s) is/are 11-20, renumbered as claims 11-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☒ Interview Summary (PTO-413),
Paper No./Mail Date 01/17/07.
- ☒ Examiner's Amendment/Comment
- ☐ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION

1. Claims 11-20 are allowed. These claims have been renumbered as claims 1-10.
2. The applicant has cancelled claims 1-10 in the amendment received on November 30, 2006.

Drawings

3. The drawings filed on February 17, 2004 are accepted by the Examiner.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Joseph Fox on January 3, 2007.

5. The specification has been amended as follows:

Please replace the paragraph beginning on page 14, line 17, with the following rewritten paragraph:

The retrieval-result output section 218 outputs character strings that are retrieved (character strings that are subjected to retrieval) by the XML documents

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retriever 213 as a retrieval result. The retrieval-result output section 218 realizes a function (of outputting) due to the I/F 109 shown in Fig. 409.1.

6. Claims 11, 17, and 19 have been amended and claim 8 has been cancelled as follows:

11. (Currently Amended) A computer implemented method of retrieving a target character string from an XML document based on a character-string table and a document-structure table, wherein the character-string table includes a plurality of character strings of variable length extracted from the XML document, and the document-structure table represents a tree structure of the XML document and includes a plurality of entries of fixed length, each of which corresponds to each of a plurality of elements in the XML document and includes a link to any one of the character strings in the character-string table, the method comprising:

judging whether a first entry in the document-structure table matches with a first condition;

extracting, from the character-string table, a character string to which the first entry is linked by the link therein when the first entry is judged to match with the first condition;

judging whether the character string matches with a second condition;

judging whether a second entry in the document-structure table matches with a third condition when the character string is judged to match with the second condition; and

extracting, from the character-string table, a character string to which the

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second entry is linked by the link therein as the target character string when the second entry is judged to match with the third ~~condition-condition~~, and
outputting the target character string to a list of retrieval results.

17. (Currently Amended) A computer implemented program for retrieving a target character string from an XML document based on a character-string table and a document-structure table, wherein the character-string table includes a plurality of character strings of variable length extracted from the XML document, and the document-structure table represents a tree structure of the XML document and includes a plurality of entries of fixed length, each of which corresponds to each of a plurality of elements in the XML document and includes a link to any one of the character strings in the character-string table, wherein the computer program causes a computer to execute:

judging whether a first entry in the document-structure table matches with a first condition;

extracting, from the character-string table, a character string to which the first entry is linked by the link therein when the first entry is judged to match with the first condition;

judging whether the character string matches with a second condition;

judging whether a second entry in the document-structure table matches with a third condition when the character string is judged to match with the second condition;-and

extracting, from the character-string table, a character string to which the second entry is linked by the link therein as the target character string when the second entry is judged to match with the third condition, and
outputting the target character string to a list of retrieval results.

19. (Currently Amended) An A computer implemented apparatus that retrieves a target character string from an XML document based on a character-string table and a document-structure table, wherein the character-string table includes a plurality of character strings of variable length extracted from the XML document, and the document-structure table represents a tree structure of the XML document and includes a plurality of entries of fixed length, each of which corresponds to each of a plurality of elements in the XML document and includes a link to any one of the character strings in the character-string table, the apparatus comprising:
- a first judging unit that judges whether a first entry in the document-structure table matches with a first condition;
 - a first extracting unit that extracts, from the character-string table, a character string to which the first entry is linked by the link therein when the first entry is judged to match with the first condition;
 - a second judging unit that judges whether the character string matches with a second condition;
 - a third judging unit that judges whether a second entry in the document-structure table matches with a third condition when the character string is judged to

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match with the second condition;~~and~~

a second extracting unit that extracts, from the character-string table, a character string to which the second entry is linked by the link therein as the target character string when the second entry is judged to match with the third ~~condition-condition, and~~
wherein the target character string is output to a list of retrieval results.

REASONS FOR ALLOWANCE

7. The following is a statement of reasons for the indication of allowable subject matter:

Applicants' response filed on November 30, 2006 overcomes the prior art rejection under 35 USC § 102(e) by Nonomura et al and the 35 USC §103 rejection of Shanmugasundaram in view of Nonomura.

The prior art of record does not render obvious to one ordinarily skilled in the art at the time of applicant's invention nor anticipate the combination of claimed elements including 'extracting, from the character-string table, a character string to which the second entry is linked by the link therein as the target character string when the second entry is judged to match with the third condition, and outputting the target character string to a list of retrieval results' as recited in independent claim 1 and similarly recited in independent claims 11 and 19.

The first condition is interpreted as elements S1604-S1607, the second condition is interpreted as element S1612, and the third condition is interpreted as elements S1609-S1611).

The remaining claims, 12-16, 18, and 20 are dependent claims, thus these claims are patently distinct over the art of record for at least the above reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

NAME OF CONTACT

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Lewis whose telephone number is (571) 272-4113. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

(571) 273-4113 (Use this FAX #, only after approval by Examiner, for "INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper/amendment be faxed directly to them on occasions.).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/ Technology Center (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl Lewis
Patent Examiner
January 16, 2007